

# Air Quality PERMIT TO CONSTRUCT

#### State of Idaho Department of Environmental Quality

**PERMIT No.:** P-2008.0131

**FACILITY ID No.:** 041-00014

AQCR: 61 CLASS: B ZONE: 12

**SIC:** 3084 **NAICS:** 326122

Franklin

UTM COORDINATE (km): 428.085, 4659.602

#### 1. PERMITTEE

Freedom Plastics, Inc.

#### 2. PROJECT

Initial PTC project – Permitting an existing PVC pipe and fitting manufacturing operation

3. MAILING ADDRESS	CITY	STATE	ZIP
640 S. Hwy. 91	Preston	ID	83263
4. FACILITY CONTACT	TITLE	TELEPHONE	
Jeannie Bell	Environmental Manger	(208) 852-2000	
5. RESPONSIBLE OFFICIAL	TITLE	TELEPHONE	
Scott Griffith	Engineering/Maintenance Manager	(208) 852-2000	
6. EXACT PLANT LOCATION		COUNTY	

# 640 S. Hwy. 91, Preston, ID 83263 7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

PVC plastic pipe fittings manufacturing

#### 8. PERMIT AUTHORITY

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

DARRIN PAMPAIAN, PERMIT WRITER DEPARTMENT OF ENVIRONMENTAL QUALITY	_	
	DATE MODIFIED/REVISED:	
	DATE ISSUED:	
MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER		

# **Table of Contents**

ACRO	NYMS, UNITS, AND CHEMICAL NOMENCLATURE	.3
1.	PERMIT TO CONSTRUCT SCOPE	.4
2.	PVC PLASTIC PIPE HEATING OPERATION WITH A GLYCOL TANK HEATER AND SPACE	
	HEATING WITH A SQUARE HEATER, A WALL HEATER, AN INFRARED HEATER, AND	
	FORCED AIR FURNACES	.5
3.	GLUING STATION PROCESS	. 6
4.	PERMIT TO CONSTRUCT GENERAL PROVISIONS	. 8

# Acronyms, Units, and Chemical Nomenclature

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region

Btu British thermal unit CAA Clean Air Act

CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dscf dry standard cubic feet

EPA U.S. Environmental Protection Agency

gpm gallons per minute

gr grain (1 lb = 7,000 grains) HAPs hazardous air pollutants

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance with

the Idaho Administrative Procedures Act

km kilometer
l/yr liters per year
lb/hr pound per hour
m meter(s)

MACT Maximum Achievable Control Technology

MMBtu million British thermal units

NESHAP Nation Emission Standards for Hazardous Air Pollutants

NO<sub>2</sub> nitrogen dioxide NO<sub>X</sub> nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM<sub>10</sub> particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

ppm parts per million

PSD Prevention of Significant Deterioration

PTC permit to construct
PTE potential to emit
PVC polyvinyl chloride
scf standard cubic feet

SIC Standard Industrial Classification

SIP State Implementation Plan

SM synthetic minor  $SO_2$  sulfur dioxide  $SO_x$  sulfur oxides T/yr tons per year

μg/m³ micrograms per cubic meter
 UTM Universal Transverse Mercator
 VOC volatile organic compound

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041 00014
<b>Location:</b>	Preston, Idaho	Facility ID No. 041-00014

# 1. PERMIT TO CONSTRUCT SCOPE

# **Purpose**

1.1 The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

# **Regulated Sources**

1.2 Table 1.1 lists all sources of regulated emissions in this PTC.

#### **Table 1.1 SUMMARY OF REGULATED SOURCES**

Permit Section	Source Description	Emissions Control(s)
	GLYCOL TANK HEATER: 01 - Natural gas-fired heater with a rated heat capacity of 1.85 MMBtu/hr	None
	SQUARE HEATER: 02 - Natural gas-fired heater with a rated heat capacity of 0.12 MMBtu/hr	None
2.	WALL HEATER: 03 - Natural gas-fired heater with a rated heat capacity of 0.03 MMBtu/hr	None
	INFRARED HEATER: 04 - Natural gas-fired heater with a rated heat capacity of 1.2 MMBtu/hr	None
	FORCED AIR FURNACES: 05 - Natural gas-fired heater with a rated heat capacity of 1.685 MMBtu/hr	None
3.	GLUING STATION PROCESS: Adhesives use - IPS Corp. Weld-On P-70 primer, IPS Corp. Weld-On 811 A-B epoxy, Arrow Adhesives AA-2304 contact cement, IPS Corp. 1969 green glue, Weld-On 711 white glue, Weld-On 711 grey glue, Weld-On 719 white glue, and Weld-On 719 grey glue	Annual Use limits

	AIR QUALITY PERMIT TO (	CONSTRUCT NUMBER: P-2008.0131
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041-00014
Location:	Preston, Idaho	racinty 1D 110. 041-00014

# 2. PVC PLASTIC PIPE HEATING OPERATION WITH A GLYCOL TANK HEATER AND SPACE HEATING WITH A SQUARE HEATER, A WALL HEATER, AN INFRARED HEATER, AND FORCED AIR FURNACES

#### 2.1 Process Description

Freedom Plastics uses standard length PVC plastic pipe as a raw material. The full lengths of pipe are cut into the required lengths on a saw. If a cut piece of pipe requires a drilled hole, it is taken to a router station for drilling. The cut pieces of pipe are then taken to the pulling station where they are placed on a heated pad and heated until they achieve the correct flexibility. At this time, a heated mandrel is placed inside the cut pieces of pipe to be pulled through the router hole.

The cut pieces of pipe are then placed in a glycol tank at the required depth and heated for the required amount of time according to the pipe thickness. After which they are moved to a belling station and placed on a mandrel to make either a hub or a gasket end. When this process is finished, the cut pieces of pipe are taken to the trim-saw for any necessary trimming. If additional pieces of pipe need to be attached, the cut pieces of pipe are taken to the gluing station operation.

Although the cutting, drilling, and trimming processes release small amount of particulates into the air, these are captured by a filtration system within the building and not vented outside.

#### 2.2 Emissions Control Description

Table 2.1 GLYCOL TANK HEATER, SQUARE HEATER, WALL HEATER, IFRARED HEATER, AND FORCED AIR FURNACES DESCRIPTION

Emissions Unit/Process	<b>Emissions Control Device</b>	<b>Emissions Point</b>
Glycol Tank Heater/01	N/A	Glycol
Square Heaters/02	N/A	Square
Wall Heaters/03	N/A	Wall
Infrared Heaters/04	N/A	Infrared
Forced Air Furnaces/05	N/A	Forced

#### **Emissions Limits**

#### 2.3 Opacity Limit

Emissions from the glycol tank heater, square heaters, wall heaters, infrared heaters, and the forced air furnaces stack, or any other stack, vent, or functionally equivalent opening associated with the glycol tanks, square heaters, wall heaters, infrared heaters, and the forced air furnaces, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

#### **Operating Requirements**

#### 2.4 Permitted Fuel

The glycol tanks, square heaters, wall heaters, infrared heaters, and the forced air furnaces shall only combust natural gas as fuel.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041 00014
<b>Location:</b>	Preston, Idaho	Facility ID No. 041-00014

#### 3. GLUING STATION PROCESS

#### 3.1 Process Description

To attach additional pieces of pipe to make a fitting the cut pieces of pipe are taken to the gluing station. Primer, epoxy, contact cement and other glues as listed in Table 3.1 are used to join the additional pieces of pipe in this operation. The finished plastic pipe fittings are then taken to the shipping area for quality assurance measurements. If a specific fitting requires a gasket, the gasket is glued in with contact cement prior to shipment.

#### 3.2 Emissions Control Description

Table 3.1 GLUING STATION PROCESS DESCRIPTION

Emissions Unit/Process	<b>Emissions Control Device</b>	<b>Emissions Point</b>
IPS Corp. Weld-On P-70 primer, IPS Corp. Weld-On 811 A-B epoxy, Arrow Adhesives AA-2304 contact cement, IPS Corp. 1969 green glue, IPS Corp. Weld-On 711 white glue, IPS Corp. Weld-On 711 grey glue, IPS Corp. Weld-On 719 white glue, and IPS Corp. Weld-On 719 grey glue	Annual Limits on Material Usage	Fugitive

#### **Emissions Limits**

#### 3.3 VOC Emissions Limits

The VOC emissions from the gluing station process shall not exceed 9.41 T/yr based upon primer, epoxy, contact cement, and glue use.

#### 3.4 Odors

No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.776.01.

## **Operating Requirements**

#### 3.5 Primer, Epoxy, Contact Cement, and Glue Use Limits

The primer, epoxy, contact cement, and glue use in the gluing station process shall not exceed any of the following limits:

- 2,000 gal/yr of IPS Corp. Weld-On P-70 primer, or
- 7.93 gal/yr (30 l/yr) of IPS Corp. Weld-On 811 A-B epoxy, or
- 100 gal/yr of Arrow Adhesives AA-2304 contact cement, or
- 300 gal/yr of IPS Corp. 1969 green glue, or
- 150 gal/yr of IPS Corp. Weld-On 711 white glue, or

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041-00014
<b>Location:</b>	Preston, Idaho	Facility ID No. 041-00014

- 30 gal/yr of IPS Corp. Weld-On 711 grey glue, or
- 1,500 gal/yr of IPS Corp. Weld-On 719 white glue, or
- 200 gal/yr of IPS Corp. Weld-On 719 grey glue.

#### Monitoring and Recordkeeping Requirements

#### 3.6 Material Purchase Records and Material Data Safety Sheets

For each material used in the gluing station process, including but not limited to primer, epoxy, contact cement, and glue use, the permittee shall record and maintain the following records:

- Material purchase records
- Material Safety Data Sheets (MSDS)

#### 3.7 Material Usage Records

The permittee shall monitor and record monthly, in gallons, the usage of all primer, epoxy, contact cement, and glue materials used in the gluing station process.

#### 3.8 **VOC Emissions Monitoring Requirements**

Using the purchase records and MSDS required by Permit Condition 3.6 and the material usage records required by Permit Condition 3.7, the permittee shall monitor and record the monthly and annual VOC emissions in tons from the gluing station process in order to demonstrate compliance with Permit Condition 3.3. Annual emissions shall be determined by summing monthly emissions over each previous consecutive 12-month period.

#### 3.9 Recordkeeping

The permittee shall comply with the recordkeeping requirements of General Provision 7.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	<b>Facility ID No.</b> 041-00014
<b>Location:</b>	Preston, Idaho	Facility 1D 140. 041-00014

#### 4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

#### General Compliance

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

[Idaho Code §39-101, et seq.]

2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

## Inspection and Entry

- 4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
  - a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit:
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

# **Construction and Operation Notification**

- 5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
  - a. A notification of the date of initiation of construction, within five working days after occurrence;
  - b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041-00014
<b>Location:</b>	Preston, Idaho	Facility ID No. 041-00014

- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence production rate and date.

[IDAPA 58.01.01.211, 5/1/94]

## Performance Testing

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

# Monitoring and Recordkeeping

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original stripchart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2008.0131		
Permittee:	Freedom Plastics, Inc.	Facility ID No. 041-00014
<b>Location:</b>	Preston, Idaho	

#### **Excess Emissions**

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

#### Certification

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

#### False Statements

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

# **Tampering**

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

# Transferability

12. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

# Severability

13. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]